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REBECCA WRIGHT

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MS. WRIGHT: My name is Rebecca Wright. I'm a resident of St. Louis. I live in Lafayette Square along with my neighbors here this evening which makes me and us some of the 50 million people within a half mile of the railroad track likely to be used for transporting highly radioactive waste which could be -- people who could be affected by a transportation accident or act of terrorism should the proposed radioactive waste repository be approved.

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[After the Three Mile Island accident, public awareness of the dangers associated with things radioactive was heightened. In 1980, in order to allay public fears regarding the transportation of radioactive waste, the Energy Department produced public relation films that purported to demonstrate the safety of casks used to transport the waste. The films showed five full-scale tests and concluded that the casks survived all the tests without releasing any radioactivity.

Footage for this film was lifted from tests conducted and filmed at Sandia National Laboratories to check the predictions on computers, not cask safety. The conclusions stated in the promotional film are contradictory to the results of the actual tests. In 1992, a reporter from a Las Vegas TV station interviewed the scientists who conducted the tests. The project manager told the reporter that during the actual fire test a breach occurred in the cask and some of the lead from the cask squirted out through the hole into the fire. The lead was part of the radiation shield.

In the terrorist test the reporter learned that when scientists shot a cask with a cannon or rocket, the projectile made a hole in the cask one inch in diameter and ripped through fuel rods inside. The project manager said that the hole itself would have let out some very small fraction of the contents of the cask, yet the promotional film maintains that all the casks survived the tests without damage severe enough to jeopardize containment of its contents.

Critics say the tests conducted at Sandia are not really comparable with conditions encountered in the actual transport of casks. Marvin Resnikoff, in his book "The Next Nuclear Gamble," cites a litany of misleading concepts and images and omitted facts. The fuel used in the Sandia tests was fresh fuel. The amount of radiation given off by irradiated fuel rods is much greater than that given off by new fuel rods. The fuel rods had stainless steel cladding which is stronger than the brittle zircaloy currently used in reactor fuel. The casks used in the tests were obsolete and at least one was designed to a higher standard. The casks had lead radiation shielding. Most casks today use depleted uranium.

In the crash tests the cask was cushioned by the cab of a truck and other impact limiters. Many types of crashes would not afford such protection. Also, many routine shipments do not incorporate as many impact limiters. Additionally, there are many crash scenarios which could exceed the cask certification requirements. Faulty valves or welds could fail in a fire or under the impact of a crash. Not all casks are secured by the type of tie-downs used in the test. A cask secured with ordinary chains used in many routine shipments would have broken loose and the casks hit the wall.

Pressure in the test casks was 26 pounds per square inch, lower than that of many casks. When filled with high-level waste, the internal pressure can be from 300 to 350 pounds per square inch.

MR. BROWN: One more minute.

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MS. WRIGHT: [Sandia fire tests were conducted at 1,475 degrees. Since the fire test was developed, combustible materials are routinely shipped which burn at temperatures up to 4,000 degrees. In the drop test a crack formed along a weld, forming a pathway for a leak. This was not mentioned in the promotional film.]

- 2 Not only do we not have assurance that shipping casks are safe, as yet no multi-purpose canister has been designed, fabricated or tested. I understand the Department of Energy has stopped its program to create a multi-purpose canister in which the spent fuel rods can be temporarily stored at the reactor, shipped and placed in permanent storage. The private sector may or may not be successful. In the meantime, the current plan is to put the irradiated fuel rods into one container at the power plant for storage, move them into a different container for shipping on a truck or train, then transfer them into yet another container for storage in the repository. Each transfer will result in the release of radioactivity to the environment and the exposure of workers.
- 3 In 1981, I believe it was, I collected hundreds of signatures for a statewide initiative asking that the Callaway Nuclear Plant not be allowed to generate radioactive waste until there was a safe permanent repository to accept the waste. Today we have a nuclear power plant on line and there is still no safe permanent repository in which to store the waste. The Department of Energy has said that to date we have only generated half the amount of waste proposed for the repository. We should stop generating radioactive waste immediately. I hope it won't take an accident. There will never be any place on earth that can isolate it from the biosphere for as long as it will remain poisonous.